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## INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(Use as many sheets as necessary)

Sheet	1	of	4
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**Complete if Known**

Application Number

Filing Date

First Named Inventor

Art Unit

Examiner Name

Attorney Docket Number

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## U. S. PATENT DOCUMENTS

[illegible]

FOREIGN PATENT DOCUMENTS

[illegible]

Examiner  
Signature

Date  
Considered

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. <sup>1</sup> Applicant's unique citation designation number (optional). <sup>2</sup> See Kinds Codes of USPTO Patent Documents at [www.uspto.gov](http://www.uspto.gov) or MPEP 901.04. <sup>3</sup> Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). <sup>4</sup> For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. <sup>5</sup> Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. <sup>6</sup> Applicant is to place a check mark here if English language Translation is attached.

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## INFORMATION DISCLOSURE STATEMENT

1. U.S. Pat. No. 4,596,929, entitled "THREE-STAGE SECONDARY EMISSION ELECTRON DETECTION IN ELECTRON MICROSCOPES," discloses a device that uses two grids to maximize the amount of secondary emission detected by a scintillator. The present invention does not employ two such grids.

2. U.S. Pat. No. 4,627,009, entitled "MICROSCOPE STAGE ASSEMBLY AND CONTROL SYSTEM," discloses a device for rotating and tilting a sample in a non-eucentric manner and compensate for the same so that an inspection point is within the field of view. The present invention does not rotate and tilt a sample in a non-eucentric manner and compensate for the same so that an inspection point is within the field of view.

3. U.S. Pat. No. 5,179,280, entitled "COMPUTER CONTROL OF THE ELECTRON MICROSCOPE SAMPLE STAGE," discloses a device for tilting a sample so that a plurality of different orientations are displayed stereoscopically with a spot representing a current orientation. The present invention does not tilt a sample so that a plurality of different orientations are displayed stereoscopically with a spot representing a current orientation.

4. U.S. Pat. No. 5,510,624, entitled "SIMULTANEOUS SPECIMEN AND STAGE CLEANING DEVICE FOR ANALYTICAL ELECTRON MICROSCOPE," discloses a device for cleaning both a sample stage, a sample, and an interior of an analytical electron microscope.

The present invention does not clean either a sample stage, a sample, or an interior of an analytical electron microscope.

5. U.S. Pat. No. 6,025,592, entitled "HIGH TEMPERATURE SPECIMEN STAGE AND DETECTOR FOR AN ENVIRONMENTAL SCANNING ELECTRON MICROSCOPE," discloses a device that can heat a sample to 1500 degrees Celsius. The present invention does not heat a sample to 1500 degrees Celsius.

6. U.S. Pat. No. 6,407,850, entitled "AUTO TILT STAGE," discloses a device for tilting a sample stage to multiple positions. The present invention does not tilt a sample stage to multiple positions.

7. In a book entitled "Scanning Electron Microscopy and X-ray Microanalysis, a Text for Biologists, Materials Scientists, and Geologists, 2Ed.," by Joseph I. Goldstein et al., published in 1992, pps. 267-270, it was disclosed that the resolution of a STEM may be achieved in a SEM by mounting a thin sample of the item to be viewed across an opening in a sample stage, placing either a scintillator coupled to a light pipe or a solid-state detector below the sample stage. The disadvantages of this method are that lateral scattering of electrons passing through the sample will determine the upper limit of image resolution and placing a scintillator and light-pipe or solid-state device under the sample stage requires modifications to the SEM which result in time-consuming setup procedures. Goldstein et al. also suggests using a tilted scattering surface of a high-atomic number. The disadvantage of this method is that lateral scattering of electrons passing through the sample will determine the upper limit of image resolution.